

ABSTRACT

A regulated gas supply system having a body defining a pressurized gas reservoir connected to a high-pressure regulator that regulates the high pressure gas from the gas reservoir to disperse the gas at a desired pressure. The regulating assembly includes a piston chamber with a piston slidably positioned in the piston chamber. A spring is positioned between one side of the piston and the piston chamber, with the piston including a piston channel to allow pressurized gas to flow through the piston. Pressure is developed on the piston opposite the spring that is proportional to the force of the spring, providing a balanced piston. The system is miniature and self-contained to fit inside any number of small pneumatically operated devices.